The MINERνA Operations Report
All Experimenters Meeting

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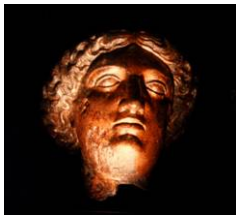
Oct 6, 2014

Water Leak

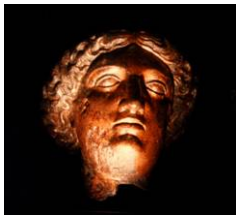
- On Sep 29 A water leak appeared above the MINERvA detector.
  - This leak was in the same place that happened during the Easter 2011 leak. This leak is at the downstream end of the MINERvA detector where the bridge is located.
    - The roof does not extend over the bridge.
  - Water dripped onto the bridge and bounced onto the FEB causing some FEBs to fail.

Water Leak



  - We assume that the drain of the drip pan above the detector got clogged, filled up and overflowed.
  - Bill Lee hit the pan with a pole and the water leak stopped, as the drain of the pan may have cleared .
- 2 FEB replacements were required to get the detector running
- Bill Moorhouse & John Chyllo checked the drip pan the next day and it was clear. They are re-evaluating the procedure to see if additional checks would have found this problem earlier.

Firmware Upgrades

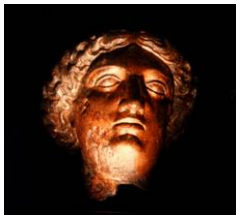


- Starting this week, we will upgrade the CROC-E firmware.
  - We will turn the detector off
    - We will also need to turn it off on Oct 9 for the Oct 10 power outage
  - The CROC-Es will be brought to the 14th floor for the upgrade
  - After about 3 working days the CROC-Es will be reinstalled in the VME crate for the MINERvA detector
  - After the reinstallation of the CROC-E, we will turn the detector back on.

CROC-E Firmware Upgrade

- The firmware upgrade for the CROC-Es.
  - Checks the CRC word
    - Goal: The CRC word (cyclic redundancy check) for all the frames will be passed to the offline to check that there is no problem with the header & data.
    - Requires changes to the DAQ & offline.
  - Should the communication line of the FEB chain fail, a feature which causes error lights to go on a FEB which causes the problem as long as the clock is being passed through the chain.
    - Right now usually the error lights go on, but not always. The software will sometime tell you which FEB fails, but often the software is wrong.

Firmware Upgrades

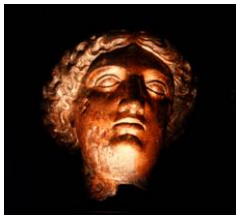


  - Enable the CROC-E firmware to be upgraded without pulling the CROC-Es out of the VME crate.
- We would like to thank – Christian Gingu, Boris Baldin, Paul Rubinov, Donatella Torretta, & Bill Badgett.

DAQ Computer Upgrade

- Two new computers are installed in the DAQ Rack, one of our 2 racks which run the experiment.
- After the installation of the CROC-Es we plan on connecting up one of the computers to our two VME racks and run the detector from this computer.
- Assuming this works the plan is to have one of these two computers as our DAQ computer.
  - The present DAQ computers will be left in place for at least 1 month so we can go back to them if needed.

ROC West



- We have started doing our on-site weekday shifts in the ROCW
- 40% of shifts still are done at remote sites
- We are verifying the setup in the ROCW will work for MINERvA shifts
  - Full functionality not yet achieved but is on the way

Half-Intensity Request

- Our special run request is
  - 12E12 POT/pulse (over 6 batches)
  - Integrate 2.0E18 POT in that mode

- This will be useful to evaluate intensity-dependent effects
- Earlier data set (2 days of 2E12 POT/pulse in late November) has been useful but does not have high enough statistics to fully quantify rate dependence.